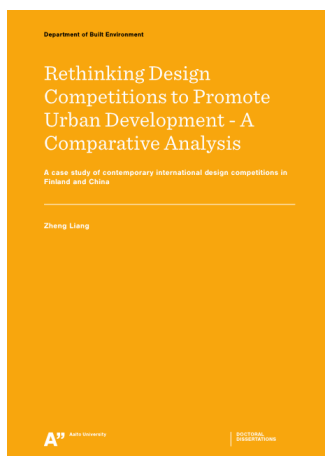

DISS. REVIEW ZHENG LIANG (PHD STUDENT, AALTO UNIVERSITY): RETHINKING DESIGN COMPETITION TO PROMOTE URBAN DEVELOPMENT – A COMPARATIVE ANALYSIS

REVIEWER: MAGNUS RÖNN

Introduction

In her PhD thesis, Zheng Liang investigates international design competitions in Finland and China. At the centre are four case studies, two urban design competitions in Finland and two urban design competitions in China. Her comparison shows cultural gaps among key players in international competitions. This is of general importance, and not only in connection to different disciplines in architecture and urban design. In international competitions, it is important to consider cultural gaps depending on different countries, education, history and traditions among key players (organiser, jury, design teams), the public and end-users.

There is a clear focus on development of design knowledge (knowledge production, knowledge use and knowledge flow) in the thesis. Liang discusses the relationship between the competition, inter-language and the organising body (developer/promoter/client) in the four case studies in China and Finland. These competitions are assessed from the organisers' perspective. The case studies show how government organisations can influence planning, design and implementation of winning proposals in China (two competitions) and Finland (one competition). There is a social context that extends beyond the competition as a time-limited process of design knowledge production. Competitions are influenced by their context, which can have a huge impact, especially in China where the competition process is not transparent.



To the four case studies, Liang adds an action research project in China in which she tests some of her ideas about the dialogue in a competition. The requirement for anonymity in the Finnish competition rules can become a barrier to knowledge flow between key players, as the design teams are not allowed to communicate face-to-face with the jury/client. In the action research project, Liang challenges this aspect of the competition rules. In the project, the competition is seen from the designer's perspective. There are thus two different points of view on knowledge in competitions.

Key concepts

Research questions are clear and relevant to the objectives of the thesis. The two key concepts – *boundary object* and *trading zone* – are explained in a satisfactory manner. The idea of viewing the competition as a trading zone for the development of an inter-language for communication is very fruitful (Galison, 1997). The jury room seems to be a typical trading zone for promoting inter-language among the jury members, at least in my interpretation of the concept in use. Members of the jury identify different aspects of qualities and can be seen as “trading” them in their search for a winning design proposal.

The boundary object as a theoretical tool was adopted in the field of urban planning and design in the 1990s (Hendersen, 1991). Liang describes four types of boundary objects in competitions, with reference to Susan Leigh Star and James R. Griesemer (1989). Competition procedures, results, representations and maps are translated into the following different types of boundary objects:

- Standardised forms and methods (competition procedures), which provide a shared format with the aim of joint communication across different disciplines.
- Repositories (synthesis of competition results), which give general access to a common and indexed reference system of data and measures which act as a shared definition or resource for problems of heterogeneity.
- Ideal type (sketches, maps, drawings, diagrams, models, simulations), which are representations as a means of communicating the vague nature of design quality.
- Coincident boundaries (competition-related project context maps), which help to clarify the design competition's geographical boundaries.

According to Liang, trading zone and boundary object as key concepts make it possible to trace how international design competitions have interacted and have been developed and whether they have acted as a trading zone, to facilitate mutual “translation” between actors from

different fields. I see advantages in analysing competitions as a trading zone, e.g. this works very well in my understanding of international competitions. However, the four different boundary objects described by Liang do not have the same power to shed new light on knowledge production, flow and use in the international design competitions studied.

Methods

The methodology is mainly based on case studies, a relevant research strategy in this doctoral thesis. Four international competitions are investigated and compared with each other. However, the motives behind the selection of competitions are somewhat unclear. According to Liang, there were different reasons for choosing the cases, so I would like to see a clearer statement of the competitions as cases and why they were selected. This kind of explanation is very important in a case-based research strategy. Some of the findings from the case studies are used in a supplementary investigation called action research, conducted as a dialogue-based competition. Liang tests design demands for a competition in Finland in a Chinese context. In the action research, designers in China propose and discuss their design solution, which are evaluated and commented upon by a jury composed of three judges. Liang organises the test and includes herself in the jury, and reflects on the results in the final discussion.

There is a clear presentation of the interviewees and the interview questions in the section on action research in China. The questions are provided in an appendix, in both Chinese and English. Liang seems also to have conducted interviews in order to better understand the competition in Baitan, Guangzhou (Case 1), but these interviews are not described in the same transparent way. I also believe that the description of the design teams, winning design proposals and members of the jury could be clearer for all four case studies. I understand that it is difficult to get access to competition documents in China (applications, selection of teams, briefs, design proposals and jury statement). Liang also points out these difficulties in Chinese competition culture. Still, I would like to know more about the organising body, participating design teams and the jury. In Finland, all important competition documents are readily available, as organisers of public competitions have to provide the required documents by law.

Overall structure and some critical aspects

The structure of the PhD thesis is clear and complete. References are presented and findings discussed according to the scientific standard. In this regard, the doctoral thesis fulfils the academic requirements. However, there are a few quotes that do not have page numbers and some graphics (Figures 11–14) are difficult to read and interpret, mainly

because of the reduction in size. I am familiar with the competition culture in Finland, but design competitions in China are a new field of research for me. By scrutinising Liang's doctoral thesis, I gained important new knowledge about the competition culture and about how design competitions are organised and used in an international context in China. My criticisms of her thesis mainly concern four aspects:

- 1) First, I think that Liang could have included more references to competitions as a research field, although I agree that there are few scientific articles dealing with international competitions as a specific subject. However, there are at least 21 PhD theses, three anthologies and seven special issues in scientific journals dealing with competitions in architecture and urban design. The tradition of competitions in Finland and China could thus have been more clearly connected to a research competition context. However, there is a major language problem in that half of the relevant doctoral theses are written in Swedish, Norwegian, Danish, Portuguese or German. The other half are written in English. In order to be able to read all the doctoral studies on competitions and understand similarities and differences in the competition cultures, wide language skills would be required.
- 2) Second, Liang seems have a strong belief in dialogue between design teams, jury and clients in competitions as a way to improve knowledge flow. There are articles by Kreiner, Holm Jacobsen & Toft Jensen about dilemmas in dialogue-based competitions in Denmark. This is relevant, since Liang examines the dialogue in competitions in China through action research. The discussion about knowledge and communication in competitions could have been improved by research references to Kreiner et al. in this part of the PhD thesis. Liang sees advantages with dialogue in competitions in supporting knowledge flow among the key actors. However, a tricky problem with dialogue in competitions (according to Kreiner et al.) is that advice from the jury leads to losses for the participating design teams, except for the winner. Recommendations given by the jury members are thus problematic from the design team's perspective. This is a dilemma for knowledge flow. Insight into the entries of others does not always promote open dialogue between design teams, jury and organiser. Therefore, I wanted Liang to problematize the dialogue in competitions. This would probably have been addressed if the jury in the action research had had to single out a winner in the competition.
- 3) Third, Liang proposes new competition rules designed to promote knowledge development and knowledge sharing in international competitions, but this important task is treated somewhat simplistically in the thesis. The key players in the organising body need an inter-language and have to bridge cultural gaps and different understandings of design solutions. I am unsure how the proposed new

rules are related to findings in the case studies and the concepts of boundary objects and trading zone. However, this is not a strong objection on my part and Liang opens the way for further discussion, which is important. The two key concepts are used and explained in a satisfactory way in the PhD thesis and show how an understanding of the cultural differences between key players in competitions can be created from a theoretical perspective.

- 4) Fourth: The doctoral study comprises competitions investigated and reported as case studies. However, there is a lack of clear information on the cases as regards winning teams, presentations of the winning proposal (for case 2) and jury members in the cases (primarily applies to cases 1, 3 and 4). The difficulty in getting access to the competition programme, competition entries and jury reports from competitions in China can be criticised from this point of view. It must be difficult to understand any cultural gaps and the knowledge flow in competitions if there is poor access to the brief, design proposals, jury reports and decisions made by the organising body. After reviewing the thesis, I agree that the concepts of boundary objects and trading zone make it possible to discuss the knowledge processes in international competitions when the empirical base is incomplete. Thus, these two key concepts are correctly identified as important as theoretical tools for understanding knowledge flow in international competitions when there are cultural gaps among the key actors.

Galison, P., 1999. Trading zone: Coordinating action and belief. In: M. Biagioli, ed. 1999. *The science studies reader*. New York/London: Routledge. pp.137–160.

Henderson, K., 1991. Flexible sketches and inflexible data bases: Visual communication, conscription devices, and boundary objects in design engineering. *Science, Technology, & Human Values*, 16(4), pp.448–473.

Jacobsen, P.H., Harty, C. and Tryggestad, K., 2016. (Re)constructing the wicked problem through the visual and the verbal: the case of a dialogue based architectural competition. In: P.W. Chan and C.J. Neilson, eds., 2016. *Proceedings 32nd Annual ARCOM Conference, 5–7 September 2016, Manchester UK*.

Kreiner, K., Holm Jacobsen, P. and Toft Jensen, D., 2011. Dialogues and the problems of knowing: Reinventing the architectural competition. *Scandinavian Journal of Management*, 27(1), pp.160–166.

Kreiner, K., 2007. *Constructing the client in architectural competition. An ethnographic study of revealed strategies*. Copenhagen: Copenhagen Business School, Department of Organization.

Star, S.L., and Griesemer, J.R., 1989. Institutional ecology, ‘translations’ and boundary objects: amateurs and professionals in Berkeley’s Museum of Vertebrate Zoology, 1907–39, *Social Studies of Science*, 19(3), pp.387–420.